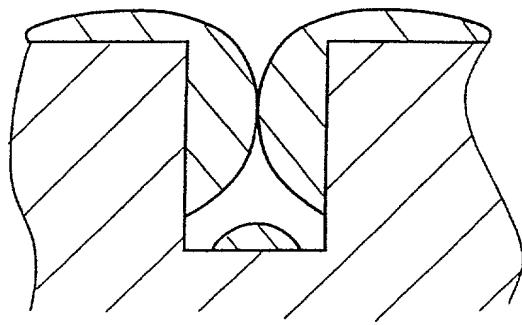


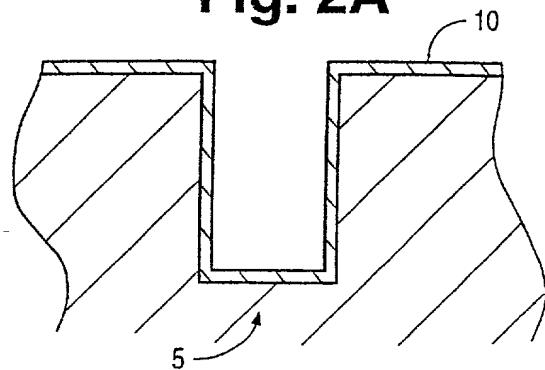
Title: APPARATUS AND METHOD FOR  
ELECTROLYTICALLY DEPOSITING COPPER ON A  
SEMICONDUCTOR WORKPIECE  
Inventor: L. Chen  
Docket No.: SEMT117581

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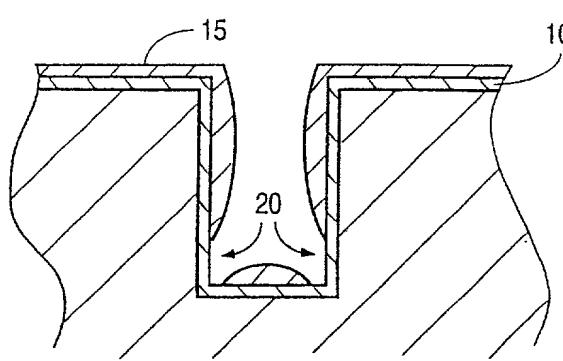
**Fig. 1**



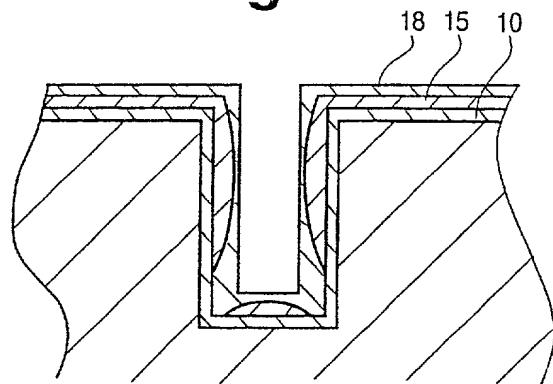
**Fig. 2A**



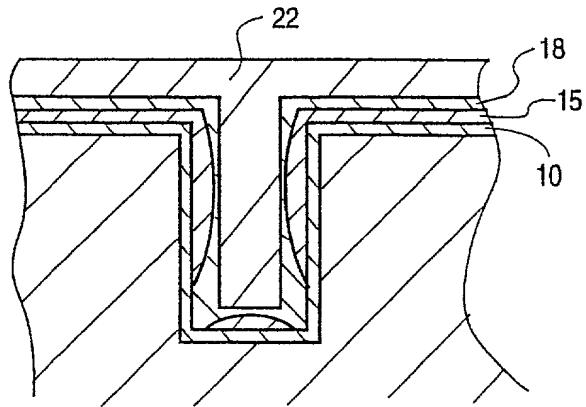
**Fig. 2B**



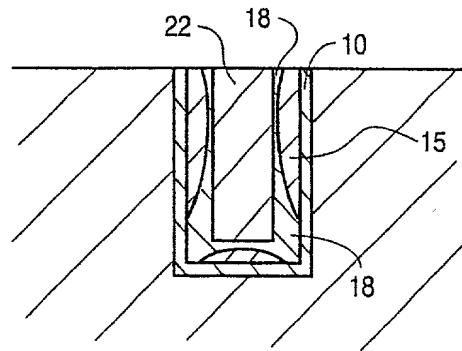
**Fig. 2C**



**Fig. 2D**



**Fig. 2E**

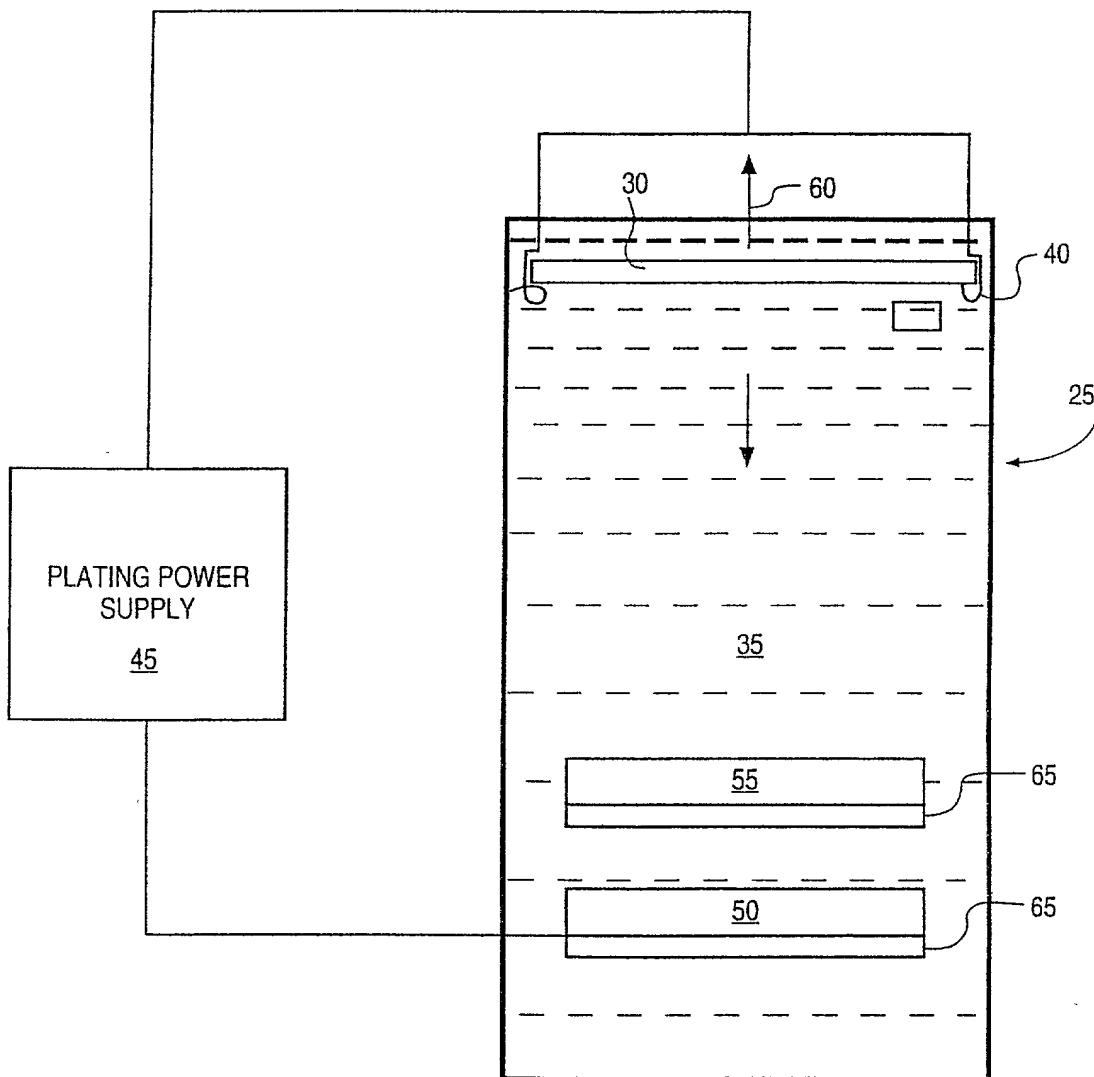


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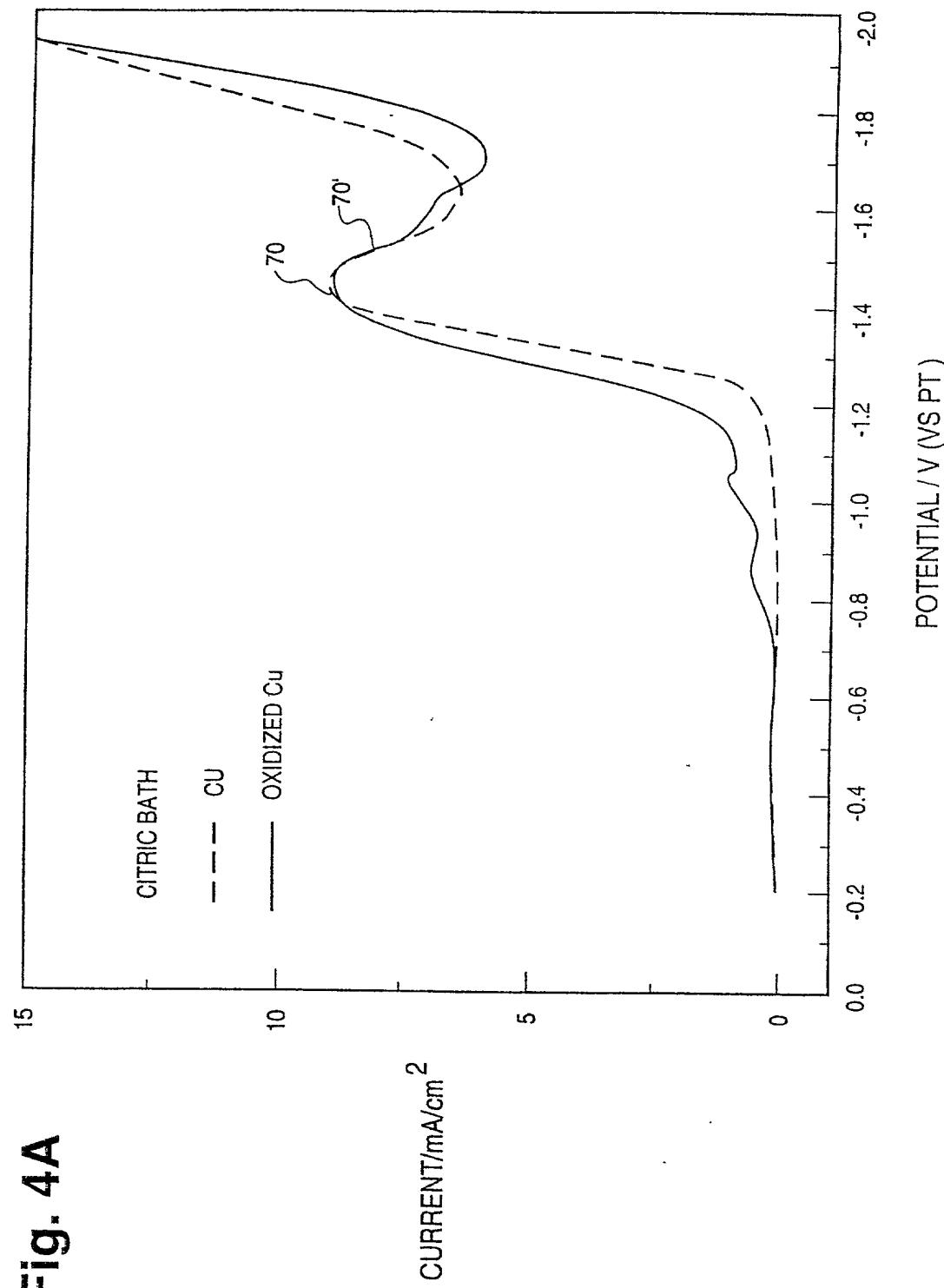
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Fig. 3



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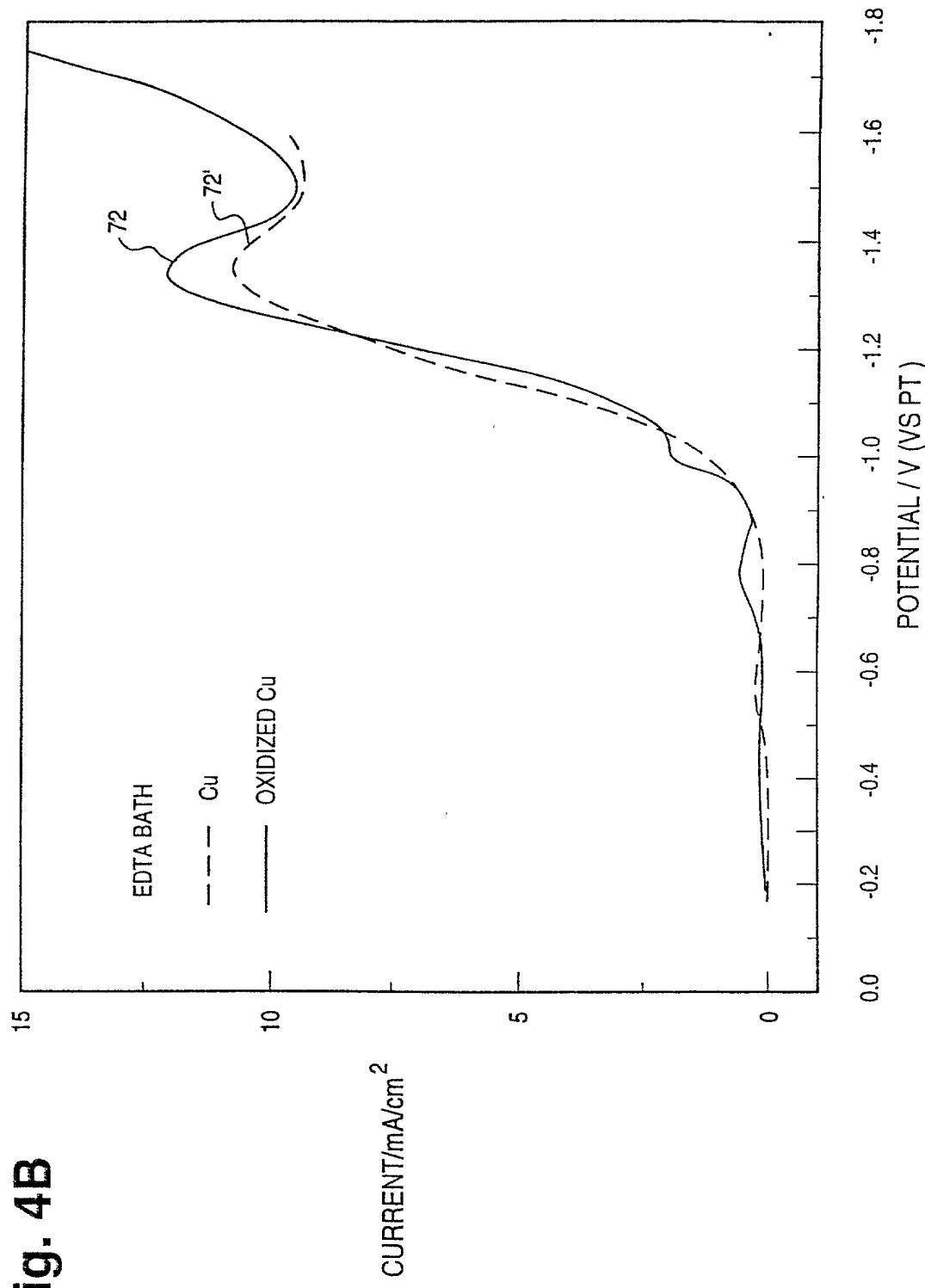


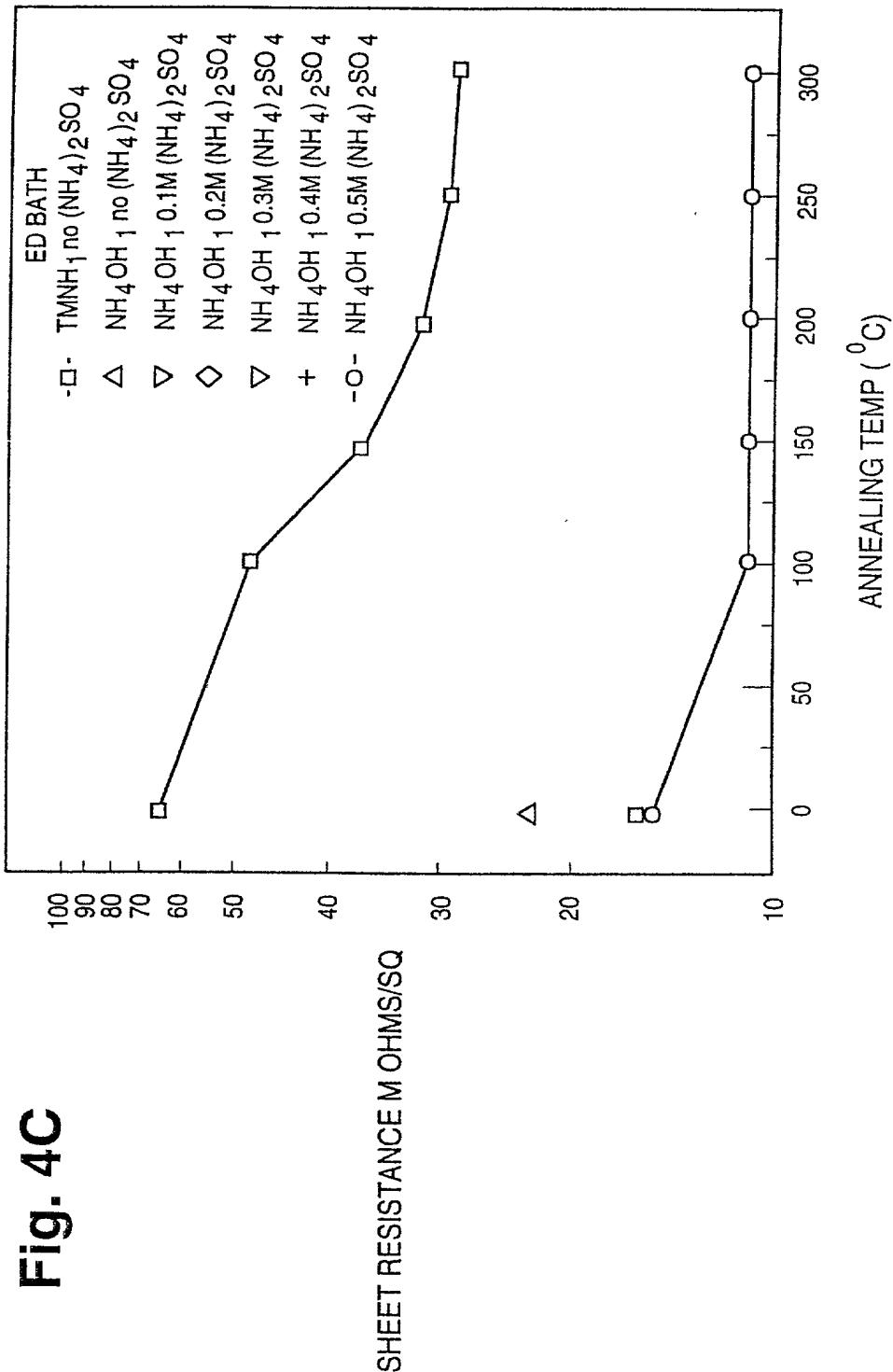
Fig. 4B

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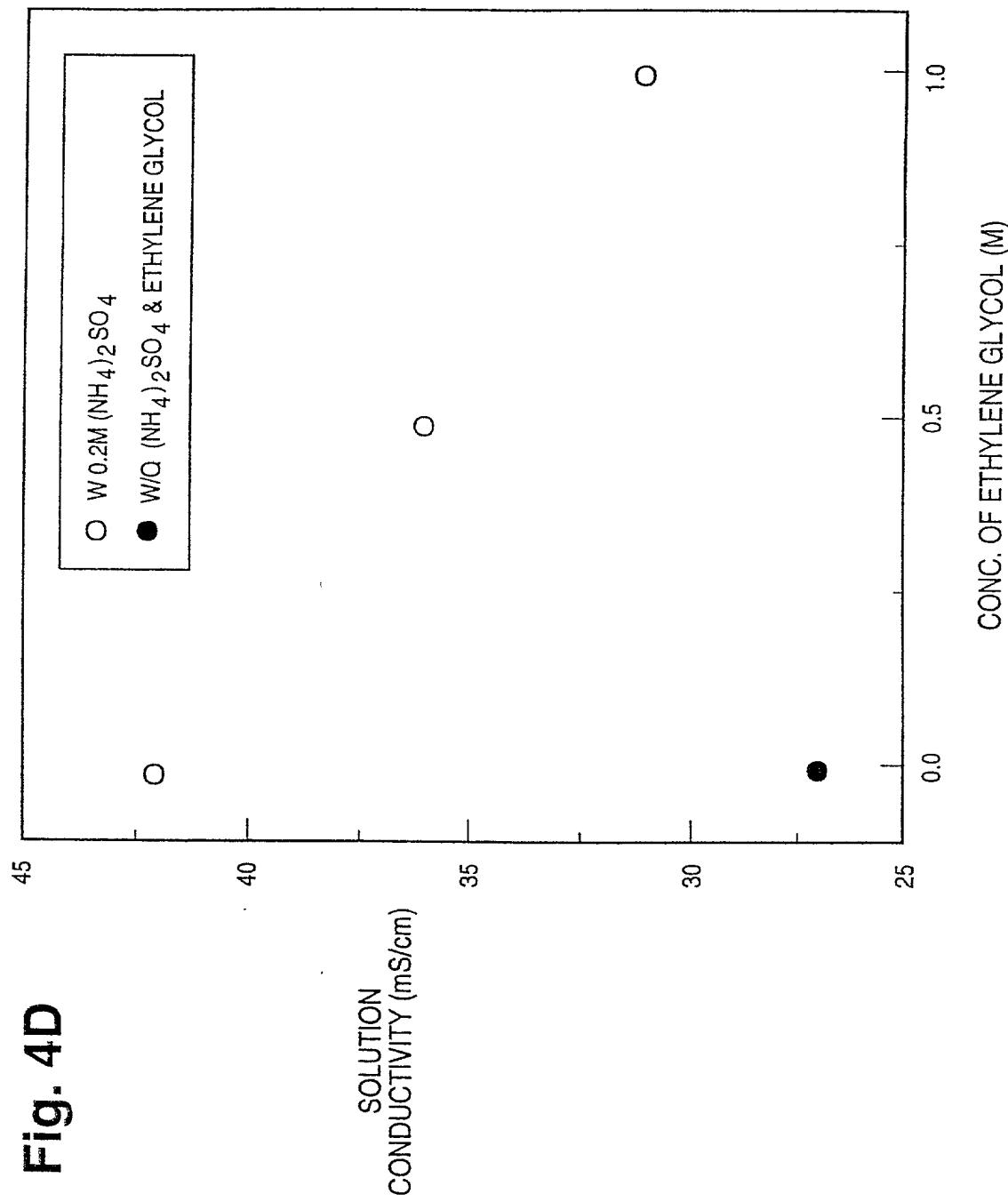
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SHEET RESISTANCE CHANGE WITH ANNEALING TEMPERATURE  
FOR THE DEPOSITS WITH AND WITHOUT  $(\text{NH}_4)_2\text{SO}_4$



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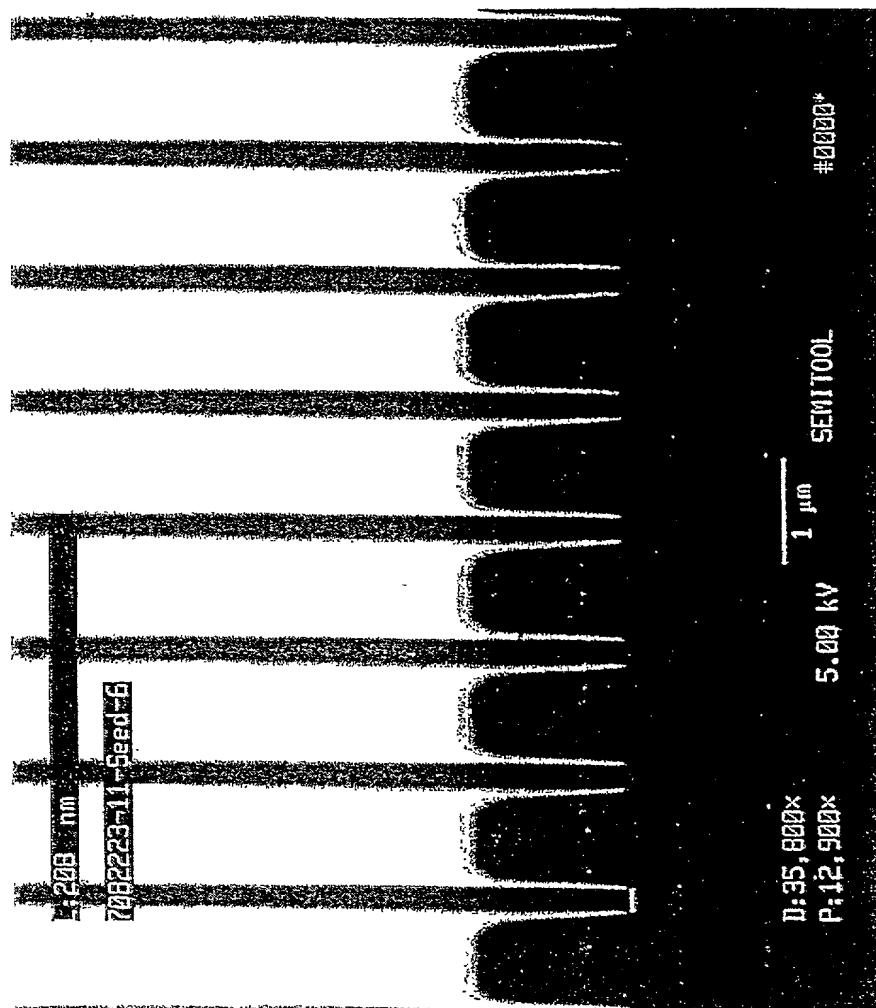


Fig. 5

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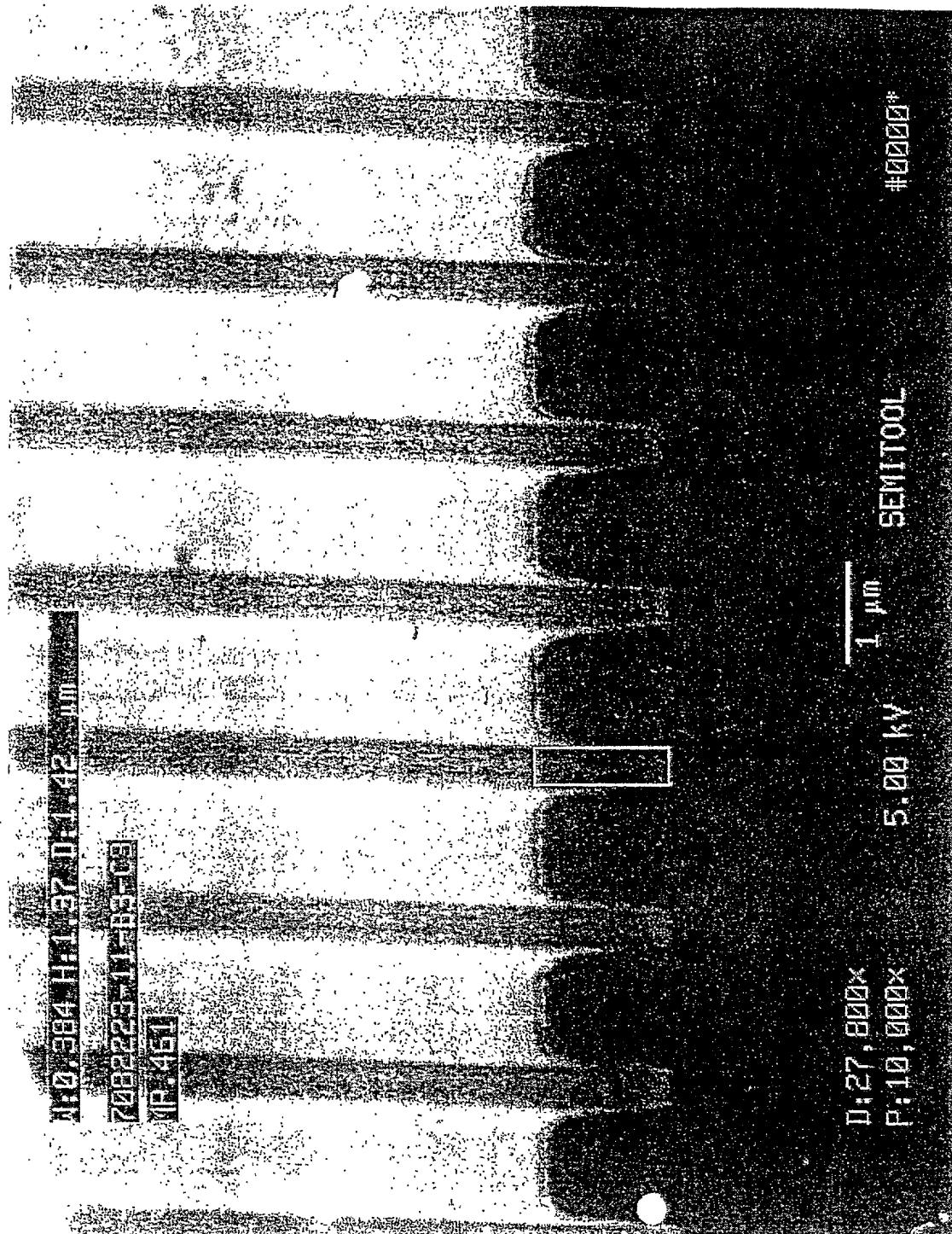


FIG. 6A

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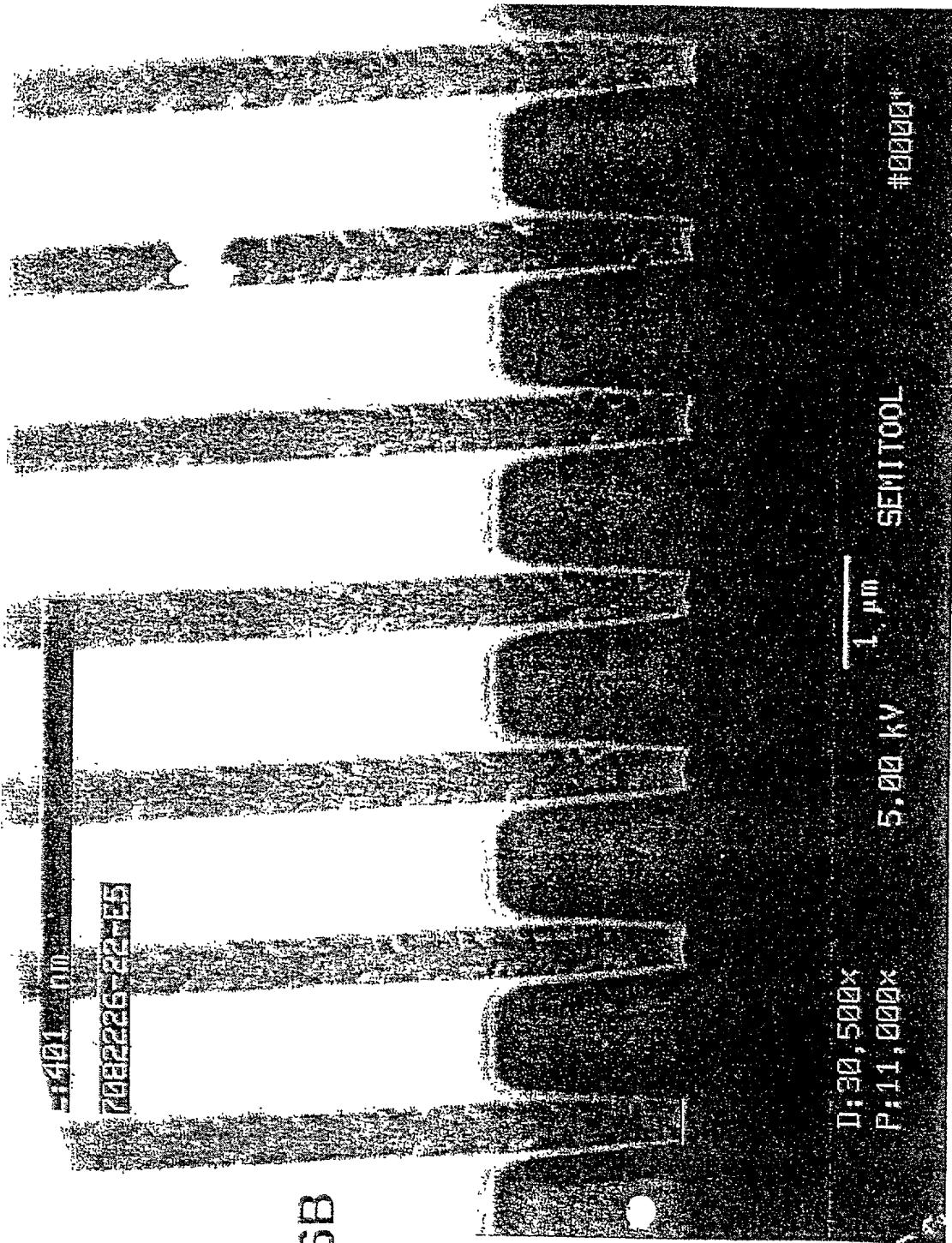


Fig. 6B

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**Fig. 7**

